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# Age and gender-specific dimensionality of the Satisfaction with Life Scale



**SESSION TITLE: LOOKING BEYOND TRADITIONAL  
DOMAINS IN PATIENT-REPORTED OUTCOMES**

**SESSION DATE & TIME: TUESDAY, MAY 19,  
4:45 PM - 5:45 PM**

**PRESENTED BY PETER DOMJAN**

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# Introduction

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- Subjective wellbeing (SWB) is a complex multidimensional phenomenon that refers to unity of affective and cognitive dimensions concerning the evaluation of one's life.
- Life satisfaction, the cognitive component of SWB, is widely used as a social indicator to direct governmental interventions that target individuals' quality of life.

# Introduction

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- Issues of dimensionality and equivalent functioning of common measures such as the Satisfaction with Life Scale (SWLS) may negatively implicate inferences and decisions derived from those measures.
- This study aimed to examine different structures of the SWLS and their stability across genders and age groups.



# Methods

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- Among community dwelling adults (N = 7531, median age = 26 (22-28) years (range = 17-81 years), (51.1% females), SWLS construct validity and stability were evaluated using:
  - Exploratory factor analysis (EFA)
  - Confirmatory factor analysis (CFA)
  - Multigroup CFA across gender and age groups

# Methods

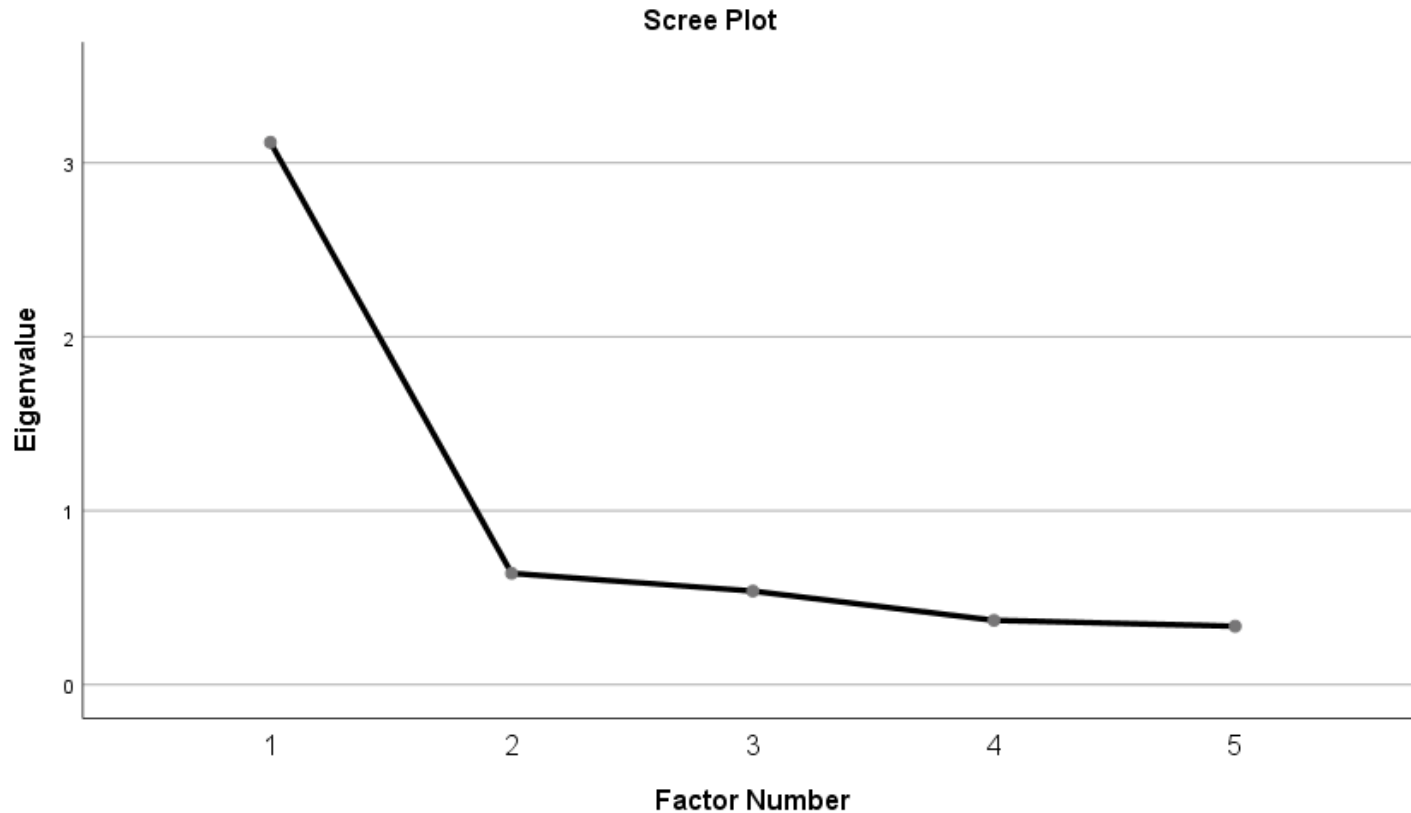
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- The dataset comprises data on the SWLS pooled from numerous publicly accessible datasets (CC By 4.0) originating from Spain.
- Subjects were predominantly community-dwelling adults.
- The pooled dataset is publicly available in Mendeley repository at <https://data.mendeley.com/datasets/yvrdpdv58z/1>.



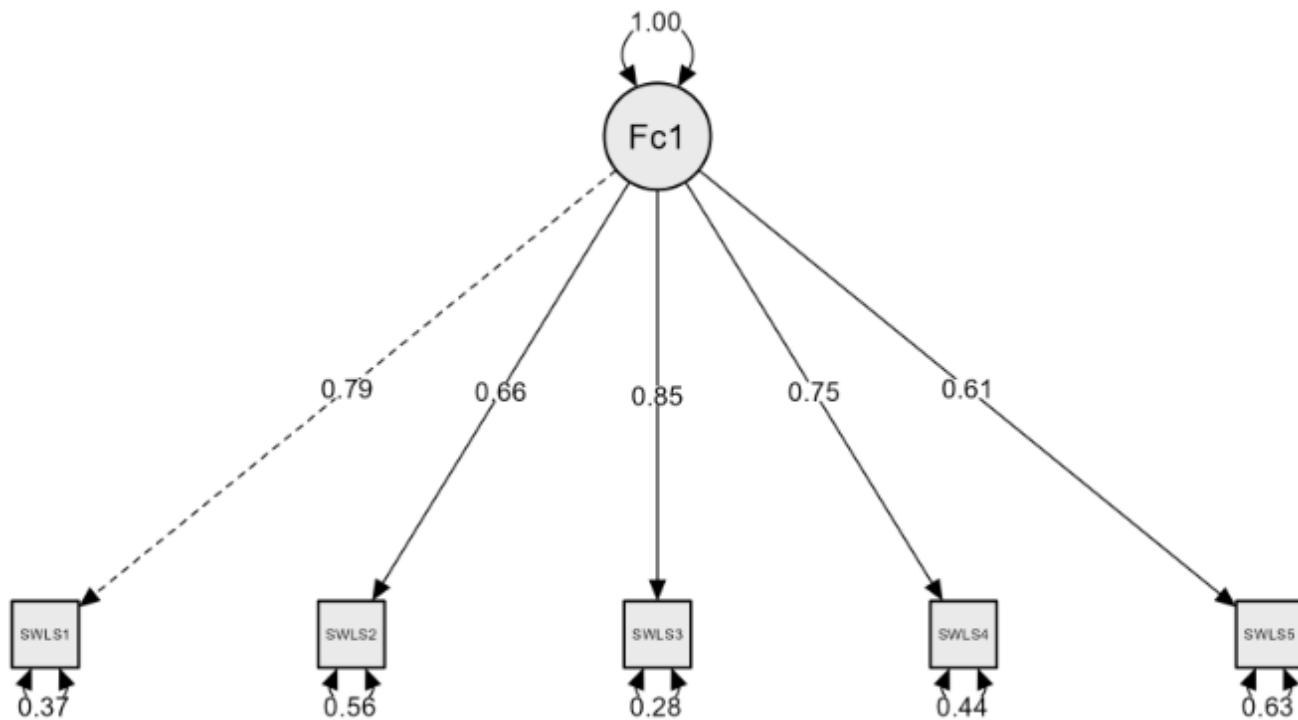
# Results

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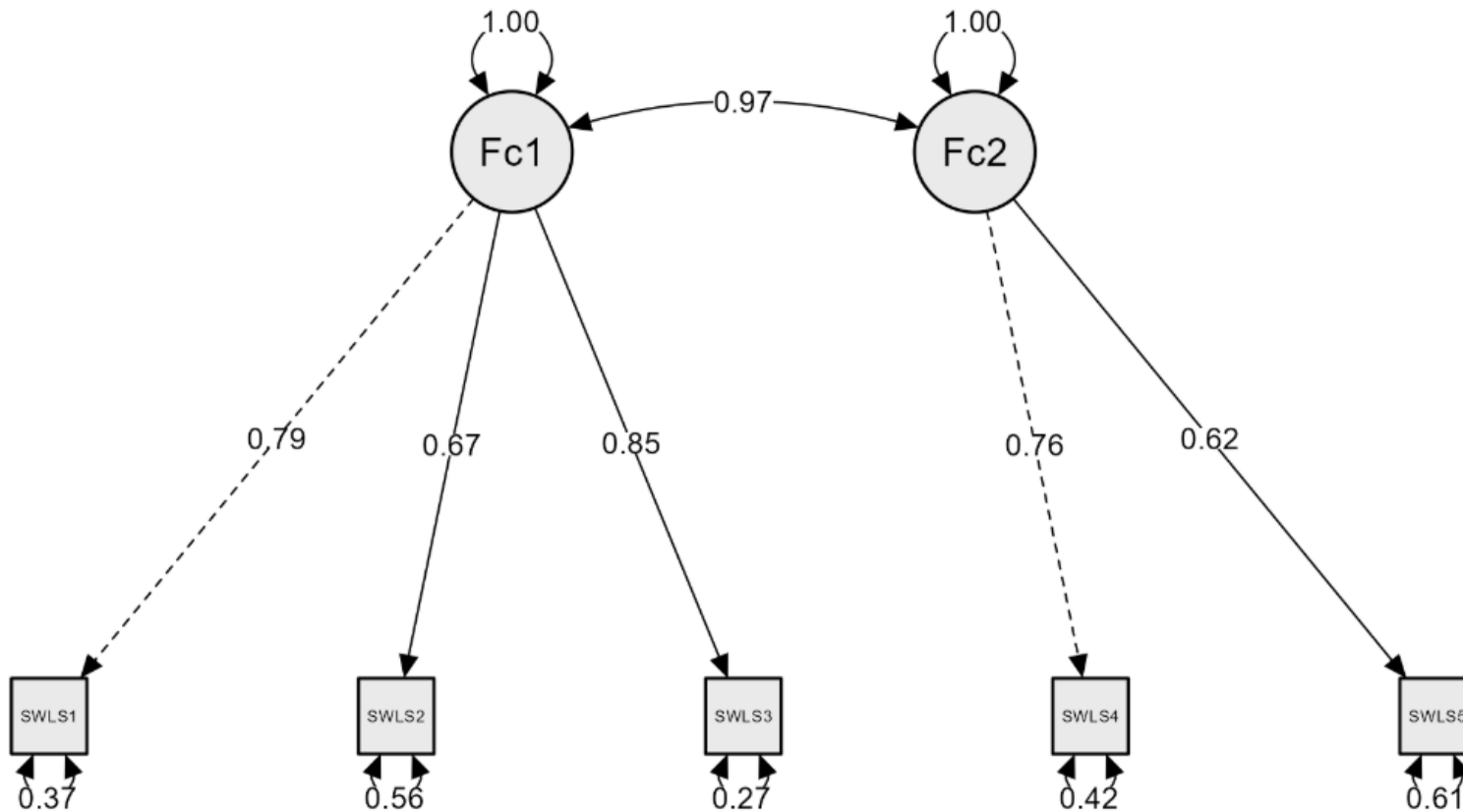
- EFA in 30% of the sample ( $n = 2246$ , KMO (0.86), Bartlett's test of sphericity  $\chi^2 (10) = 4561.84$ ,  $p = 0.001$ ) revealed a single factor with an eigenvalue of 3.12, which explained 62.35% of the variance.

# The unidimensional SWLS expressed good fit with all loadings above 0.5



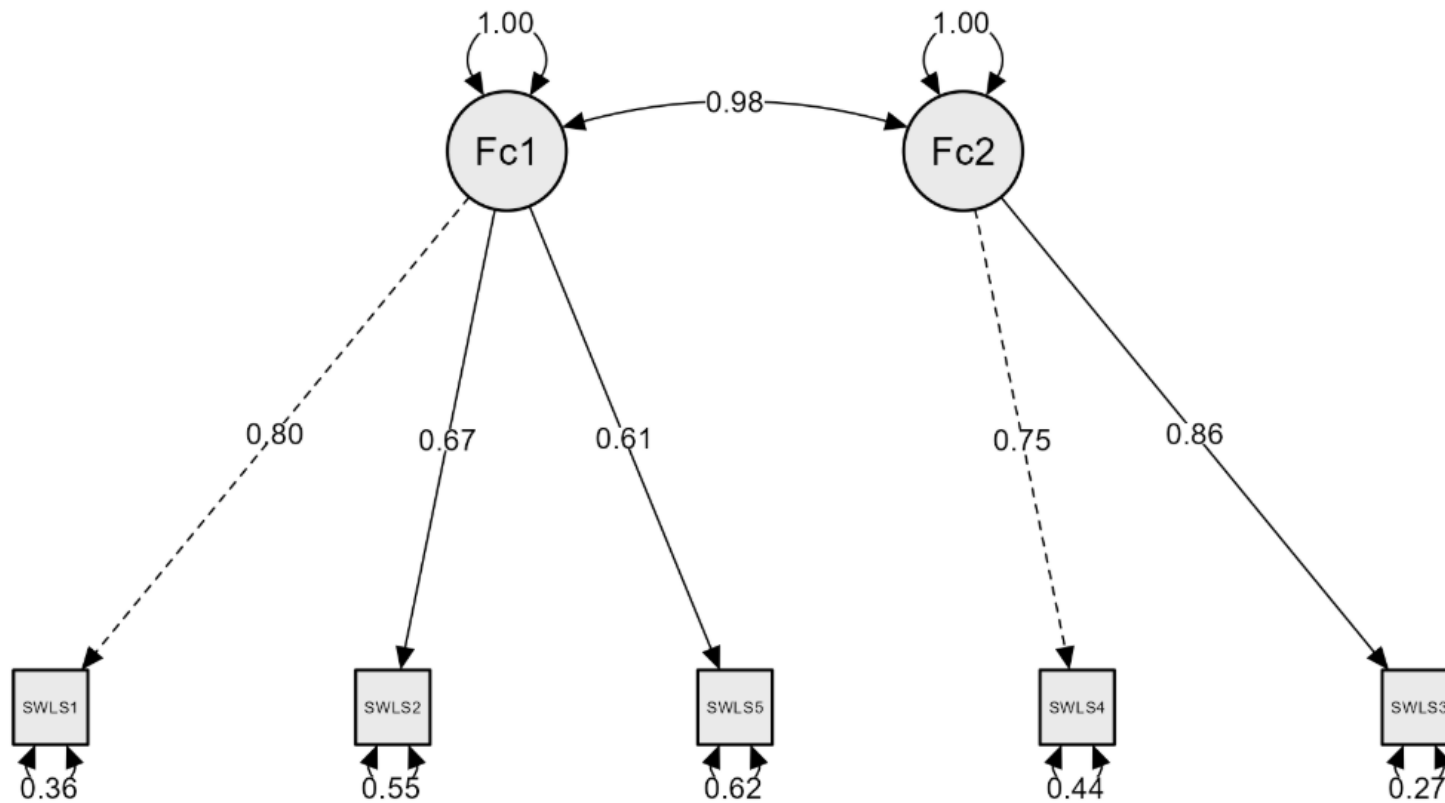
- ( $\chi^2 = 106.14$ ,  $DF = 5$ ,  $p = 0.001$ ,  $CFI = 0.994$ ,  $TLI = 0.987$ ,  $RMSEA = 0.052$ ,  $RMSEA\ 95\% [0.044\ to\ 0.061]$ ,  $SRMR = 0.014$ )

# The bidimensional (present and past) SWLS expressed good fit with all loadings above 0.5



- ( $\chi^2 = 92.60$ ,  $DF = 4$ ,  $p = 0.001$ ,  $CFI = 0.994$ ,  $TLI = 0.986$ ,  $RMSEA = 0.054$ ,  $RMSEA\ 95\% [0.045\ to\ 0.064]$ ,  $SRMR = 0.013$ ).

# The bidimensional (Congruence and Achievement) SWLS expressed good fit with all loadings above 0.5



- ( $\chi^2 = 98.83$ ,  $DF = 4$ ,  $p = 0.001$ ,  $CFI = 0.994$ ,  $TLI = 0.985$ ,  $RMSEA = 0.056$ ,  $RMSEA\ 95\% [0.047\ to\ 0.066]$ ,  $SRMR = 0.014$ ).

# Results

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- Bifactor and second-order structures based on both two factor-structures did not converge.

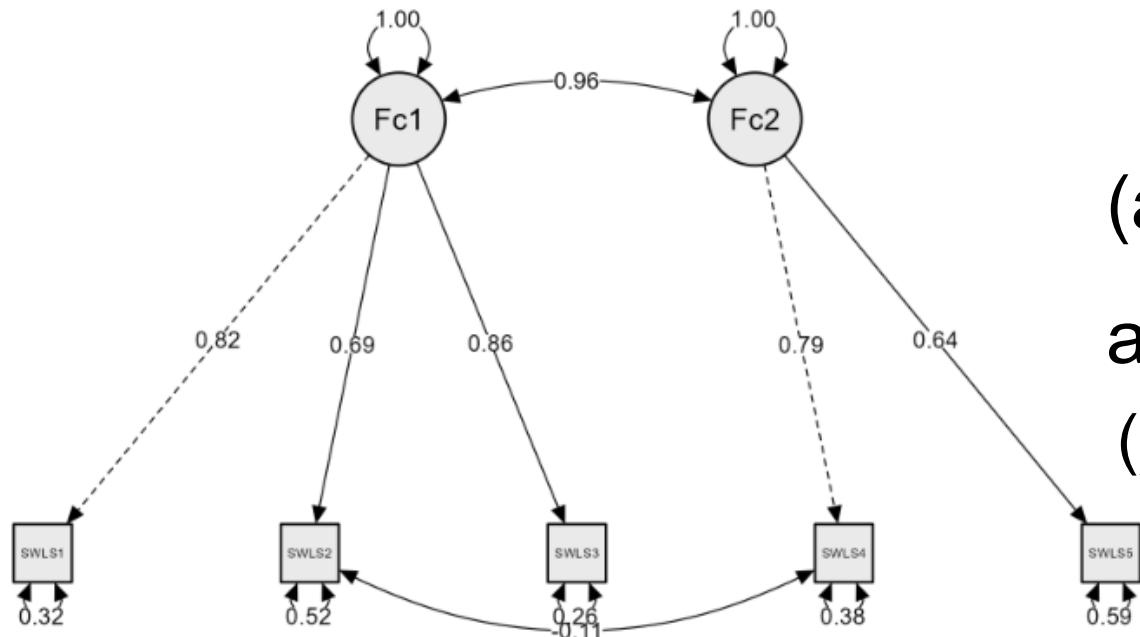
# Results

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- The three structures were invariant at the configural metric, scalar, and strict levels across **age** (<26, ≥26 years) while **only the unidimensional SWLS was invariant at all levels across genders.**

# Results

- Present/past life satisfaction converged only in females, and its fit slightly improved when the errors of items 2 and 4 correlated.

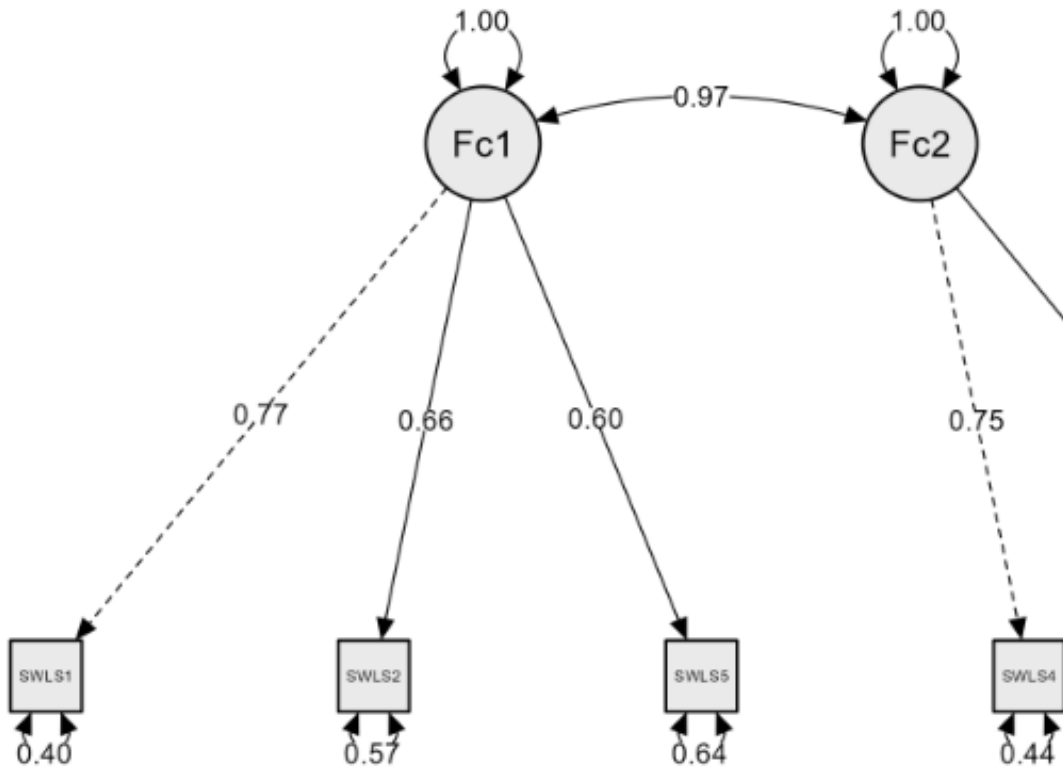


(a) Present/past life satisfaction among females

( $\chi^2$  (3) = 11.27,  $p$  = 0.001, CFI = 0.999, TLI = 0.997, RMSEA = 0.027, RMSEA 90% CI = 0.011-0.044, SRMR = 0.006)

# Results

- Congruence/Achievement SWLS converged only in males, with excellent model fit.



(b) Congruence/Achievement among males

( $\chi^2$  (4) = 39.59,  $p$  = 0.001, CFI = 0.995, TLI = 0.987, RMSEA = 0.049, RMSEA 90%

CI = 0.036-0.064, SRMR = 0.013)



# Conclusion

# Conclusions

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- The findings support the use of the Spanish SWLS as a single-factor instrument for comparative purposes in the general population.

# Conclusions

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- SWLS components (cognitive “congruence/achievement” or experiential “past/present satisfaction”) are interpreted uniformly among different age groups.

# Conclusions


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- Gender-specific convergence patterns suggest meaningful gender-related nuances in its dimensional expression males and females differently conceptualize SWLS components.
  - Males: responses align better with a cognitive evaluative structure (congruence/achievement).
  - Females: responses align better with an experiential temporal structure (past/present satisfaction).

# Conclusions

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- Research should explore theoretical mechanisms underlying differential structuring of life satisfaction and examine whether these gender-specific dimensional patterns replicate across cultures and longitudinal designs.



**Thank you for your  
attention**